What is claimed is:

1. A DC to DC converter comprising:

a first comparator configured to compare a first signal with a second signal, wherein said first signal has a DC offset determined, at least in part, by a DC reference voltage source, and wherein said second signal is representative of an output voltage level of said DC to DC converter, said comparator further configured to provide a control signal to a driver based on a difference between said first signal and said second signal, said driver driving said output voltage of said DC to DC converter; and

an accuracy circuit configured to provide a predetermined offset voltage value to one of said first signal and said second signal based on a difference between a DC voltage level of said DC reference voltage source and said output voltage of said DC to DC converter.

2. The DC to DC converter of claim 1, wherein said accuracy circuit is configured to provide said predetermined offset voltage value to said first signal.

3. The DC to DC converter of claim 2, wherein said predetermined offset voltage value is a positive voltage if said output voltage of said DC to DC converter is less than said DC voltage level of said DC reference voltage source.

4. The DC to DC converter of claim 2, wherein said predetermined offset voltage value is a negative voltage if said output voltage of said DC to DC

converter is greater than said DC voltage level of said DC reference voltage source.

5. The DC to DC converter of claim 1, wherein said accuracy circuit is configured to provide said predetermined offset voltage value to said second signal.

6. The DC to DC converter of claim 5, wherein said predetermined offset voltage value is a negative voltage if said output voltage of said DC to DC converter is less than said DC voltage level of said DC reference voltage source.

7. The DC to DC converter of claim 5, wherein said predetermined offset voltage value is a positive voltage if said output voltage of said DC to DC converter is greater than said DC voltage level of said DC reference voltage source.

8. The DC to DC converter of claim 1, wherein said accuracy circuit comprises an error amplifier and an offset voltage source, said offset voltage source responsive to an output signal of said error amplifier to provide said predetermined offset voltage value.

9. A DC to DC converter comprising:

a first comparator configured to compare a first signal with a second signal, wherein said first signal has a DC offset determined, at least in part, by a DC reference voltage source, and wherein said second signal is representative of an output voltage level of said DC to DC converter, said comparator further configured to provide a control signal to a driver based on a difference between said first signal and said second signal, said driver driving at least one switch to control a level of said output voltage of said DC to DC converter;

an inductor coupled to said at least one switch; and

a stability circuit configured to provide said second signal to said comparator based on a current level through said inductor.

10. The DC to DC converter of claim 9, wherein said current level is an instantaneous current level through said inductor.

11. The DC to DC converter of claim 10, wherein said stability circuit comprises an operational amplifier and a resistor network configured to provide a predetermined amplification factor to said current level.

12. The DC to DC converter of claim 11, wherein said resistor network comprises a first resistor and a second resistor, and wherein said predetermined amplification factor is equal to (1 + R2/R1), where R1 is a resistance value of said first resistor and R2 is a resistance value of said second resistor.

13. The DC to DC converter of claim 11, wherein an LC filter comprising said inductor is coupled to said at least one switch, and wherein said stability circuit further comprises an RC circuit coupled to one input terminal of said operational amplifier, said RC circuit configured to enhance stability of said DC to DC converter by adding a zero in a frequency range of a dual pole of said LC filter.

14. The DC to DC converter of claim 9, wherein said current level is an AC current level.

15. The DC to DC converter of claim 14, wherein an LC filter comprising said inductor is coupled to said at least one switch, and wherein said stability circuit further comprises an RC circuit configured to enhance stability of said DC to DC converter by adding a zero in a frequency range of a dual pole of said LC filter.

16. The DC to DC converter of claim 15, wherein said stability circuit further comprises an amplifier having an output coupled to said RC circuit for providing an amplification factor to said second signal.